



## Case Study: Mississippi Bend Area Education Agency

### The Problem/Challenge

The MBAEA runs a Fiber Consortium on behalf of its public and accredited non-public schools. To achieve this, MBAEA acted as an Internet Service Provider by purchasing enterprise-grade equipment and running on a pair of high availability firewalls. As bandwidth needs grew and the firewalls became overloaded or experienced technical difficulties, the member schools would be negatively impacted. As a result, these schools started to purchase their own firewalls or transition completely out of the Fiber Consortium. The primary issue was that MBAEA couldn't constantly upgrade equipment to meet the increased demand or hire enough staff with the technical knowledge to adequately run as an ISP. The MBAEA wanted to find a more cost effective way to facilitate this move away from being an ISP.

A major flaw in the design was every Consortium member had to purchase a fiber line to the MBAEA and the MBAEA had to purchase bandwidth to provide Internet to each school. This network design was insecure, outdated, and presented some inherent flaws present in operating a Wide Area Network (WAN) for separate organizations.

### Overview

The Mississippi Bend Area Education Agency (MBAEA) is one of nine area education agencies in Iowa. Created to ensure all children have equal educational opportunities, MBAEAs provide academic support to local schools. These programs and services are designed to improve teaching and learning styles to ensure quality education for all students.

Today, more than 49,500 students in public and approved non-public schools are served by the Agency. This area includes all of Clinton, Scott, and Muscatine counties, and parts of Cedar, Jackson, and Louisa counties.

Plus, the cost to maintain the ISP setup, purchase fiber lines on multiple sides, and manage the firewalls was incredibly high. With multiple carriers in place any outage or issue presented obstacles to try and pinpoint how to find a resolution and restore services. There was no single point of contact and a lot of finger pointing.

"The original solution we had was good fifteen years ago, but in this day and age, it was no longer an effective use of time, money, or resources to manage that setup. We needed a better solution." said Randy Olsen, Coordinator of Information Technology for the MBAEA.

# MBAEA Solution:



IP Pathways collaborated with MBAEA staff to design a custom, industry-changing solution. With this new product, IP Pathways procures the Internet circuit for each school, leveraging the best value in each location, and acts as the single point of contact. Each school is then provided a direct, private fiber connection directly to the IP Pathways data center. Every fiber connection is private, direct, managed, and includes a highly resilient basic firewall bundled into a single cost. As an add-on, each basic firewall can be upgraded to include advanced firewall features fully supported by IP Pathways. This solution gives the schools an option to stop buying and maintaining their own firewalls and a single point of contact for any support needs. With this being a direct connection to each school it eliminates the need for multiple fiber connections and greatly simplifies the MBAEA's ability to deliver Internet to each school.

**“IP Pathways was able to take the burden of the ISP from us, which allowed us to consolidate all of our costs down to a single bandwidth line and reduce the complexity of our network. Plus, it’s created this privatized network that runs from all of our locations straight to a centralized data center, which opens up a whole new world of opportunities for the schools,”** said Randy.

Our custom solution also kept pace during the COVID-19 pandemic, when schools across the country transitioned to online learning. The MBAEA's network was able to accommodate the large increase in internet traffic, which made the transition from in-person learning to remote education easy without any additional costs to upgrade equipment.

Moving forward, the MBAEA plans to expand its partnership with IP Pathways by leveraging additional solutions and managed Services. “We’re starting to use some of the AdaptiveCloud offerings including virtual servers, backup and disaster recovery solutions, and web DNS Filtering.” said Randy.



## Technology & Managed Services



Firewall as a Service



Connectivity/Fiber connection lines



Data Center/ Colocation



DNS Security



Managed Services



24x7x365 Support



## The IP Pathways Advantage

As part of our “customer first” approach, we invest all our time and energy into providing tailored solutions to meet our clients’ needs. At IP Pathways, it’s not just training, project planning, and implementation that are important—we also support our customers after deployment 24x7x365.